

WATER HEATING DEVICE

ABSTRACT OF THE DISCLOSURE

A water heating device is arranged between a water tank and a water faucet located below the water tank. Water from the water tank flows along a pipeline through the water heating device to the faucet. The water heating device includes a hydroelectric generation system including a turbine mounted in the pipeline and a generator coupled to the turbine by a shaft. Water flowing through the pipeline drives the turbine and thus causes the generator to generate electricity. The electricity is supplied to an electrical heater that heats the water flowing through the pipeline. A control unit controls the electricity supplied to the electrical heater thereby controlling the thermal energy transferred to the water. Thus, no external and independent energy source is required for heating the water.